

TRAFFIC CRASH INJURIES AND DISABILITIES: THE BURDEN ON INDIAN SOCIETY



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This state fact sheet highlights the impact of road crashes on people belonging to different social categories in the state. The fact sheet uses data from the 2021 study titled "Traffic Crash Injuries and Disabilities: The Burden on Indian Society". The fact sheet depicts data on the average costs of road crashes, insurance compensation, disability status, and so on.

Tamil Nadu is a southern state in India, which is the most populated state in the country. With 37 districts, the state has a projected 2020 population of 7.78 crores, with a nominal Gross State Domestic Product (GSDP) in 2020-21 of INR 20,91,927 crore³. The per capita GSDP of Tamil Nadu at constant prices was INR 1,56,041 in 2018-19. The urbanisation rate in Tamil Nadu is high. As of 2011, 48.45 % of Tamil Nadu's population resides in urban areas⁷.



Tamil Nadu recorded 2,61,09,000¹ registered vehicles as of March, 2017. The state also witnessed 57,228 road crashes and 10,525² road crash deaths in 2019 alone, making it the state with the 6th highest road crash deaths in 2019.

Based on several factors like proportion of urban population, literacy rate, poverty rate and per capita net state GDP, Tamil Nadu has been categorised as a "High Capacity State" in this study. Tamil Nadu also has a relatively high female literacy rate. As of 2011, the female literacy rate in the state was 73.86%, while male literacy rate was 86.81%⁶. In terms of State performance on meeting the SDG goals, Tamil Nadu scores 67 on the index. This indicates that Tamil Nadu has met 67% of the SDG targets for 2030⁴. The state has also scored 72 on the SDG of no poverty.

Population 7.78 Crores



2017 2,61,09,000 Registered vehicles



2019
57,228
road
crashes



2019
10,525²
road crash
deaths

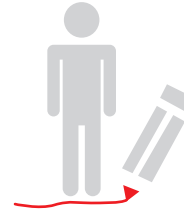
6th
highest road
crash
deaths in 2019



2011
73.86%
female
literacy
rate



2011
86.81%⁶
male
literacy
rate



1. Ministry of Road Transport and Highways, "Road Transport Yearbook", Ministry of Road Transport and Highways website, September 23, 2019, Accessed on October 9, 2020, <https://morth.nic.in/sites/default/files/Road%20Transport%20Year%20Book%202016-17.pdf>
2. National Crime Records Bureau, "Accidental Deaths and Suicides in India", National Crime Records Bureau Website, August 28, 2020, Accessed on October 9, 2020, https://ncrb.gov.in/sites/default/files/ADSI_2019_FULL%20REPORT_updated.pdf
3. PRS India, "Tamil Nadu Budget Analysis 2020-21", PRS India website, February, 2020, Accessed on October 9, 2020, <https://www.prsindia.org/parliamenttrack/budgets/tamil-nadu-budget-analysis-2020-21>
4. NITI Aayog, "SDG India Index & Dashboard, 2019-20", NITI Aayog Website, December 20, 2019, Accessed on October 9, 2020, https://niti.gov.in/sites/default/files/SDG-India-Index-2.0_27-Dec.pdf
5. Unique Identification Authority of India, "State/ UT wise AADHAR Saturation Data", UIDAI website, May 31, 2020, Accessed on October 9, 2020, <https://uidai.gov.in/images/state-wise-aadhaar-saturation.pdf>
6. 2011 Census India, "Tamil Nadu data", Census India website, 2011, Accessed on October 9, 2020, https://censusindia.gov.in/2011-prov-results/data_files/tamilnadu/3.Tamil%20Nadu_PPT_2011-BOOK%20FINAL.pdf
7. State Planning Commission, "Chapter 7: Urbanisation, 12th Five Year Plan Tamil Nadu", State Planning Commission website, 2012, Accessed on October 9, 2020, http://www.spc.tn.gov.in/12plan_english/7%20Urbanisation.pdf

PROFILE OF THE SAMPLE IN TAMIL NADU:

- A total of 510 respondents (victims and household members) participated in the survey for the PSIA study. Among them, 103 respondents (20.2%) belonged to High Income Households (HIH), and 407 respondents (79.8%) belonged to Low Income Households (LIH). The average monthly household income for HIH was approximately INR 2.05 lakhs, and for LIH, the income was INR 32,125. In addition, 100 truck drivers with an average income of INR 27,850 were included in the survey. 77.8% of the respondents were male road crash victims, and 22.7% were female road crash victims. As

many as 179 (35.1%) of the victims were chief wage earners. 40.2% of the victims live(d) in urban areas.

- 102 of the households had a family member that died as a result of the road crash (20%). About 4.3% of these victims died at the crash scene. In addition, 51 victims suffered from some disability (10%). Out of these, 39 victims (76.5%) developed a long term disability.
- The average estimated Out of Pocket Expenses borne by victims/ household members across households was INR 61,976. About 90% of the respondents received some form of compensation.

TABLE 1: RESPONDENT PROFILE

Particulars	Tamil Nadu
Participants (#, %) in HIH	103 (20.2)
Average monthly household income for HIH (INR)	2,04,612
Participants (#, %) in LIH	407 (79.8)
Average monthly household income for LIH (INR)	32,125
Participants (#) as truck drivers	100
Average monthly income from driving profession for truck drivers (INR)	27,850
% of female victims	22.7
#, % crash deaths	(102) 20.0
#, % with major crash injury	(408) 80.0
#, % recovered with some disability	(51) 12.5*
#, % have long term mobility disability	(39) 76.5
% of victims who were chief wage earner	179 (35.1)

*taken as a percentage figure of total major injuries.

PROFILE OF VICTIMS BASED ON THE OUTCOME OF THE CRASH:

- Based on the outcome of the crash, most of the victims that died belonged to low income households. For urban areas, 93.8% of the victims that died belonged to LIH and in rural areas, 80.2% of the victims that died belonged to LIH.
- Further, it can be observed that 83.3% of the female victims that died in urban areas from LIH and 16.7% of

the female victims that died in urban areas were from HIH. For males, the proportion of victims that died was higher for LIH in both urban and rural areas, with LIH comprising 100% of the male victims in urban areas, and 88.7% of the male victims in rural areas. 66.7% of the female victims that died in rural areas belonged to LIH, and 33.3% belonged to HIH.

- Proportion of male and female victims that survived in both urban and rural areas was higher for LIH than for HIH.

CHART 1: HABITATION- WISE TRENDS OF ROAD CRASH OUTCOMES

Chart 1a: % of victims that survived in urban areas

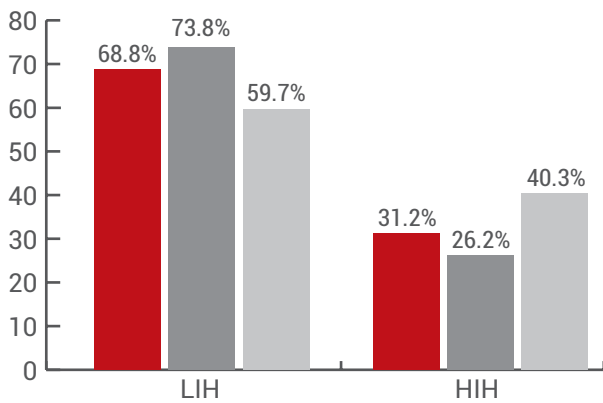


Chart 1b: % of victims that survived in rural areas

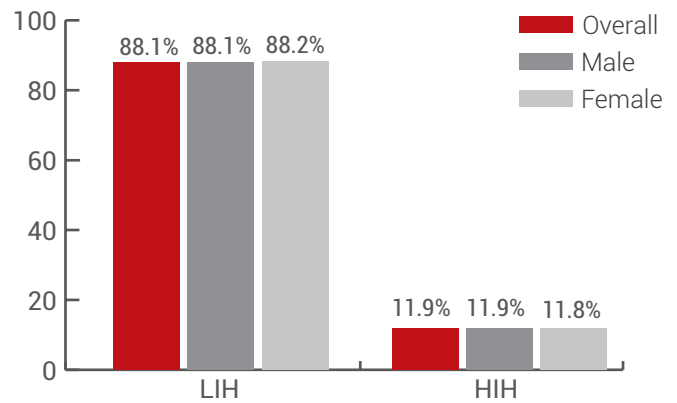


Chart 1c: % of victims that died in urban areas

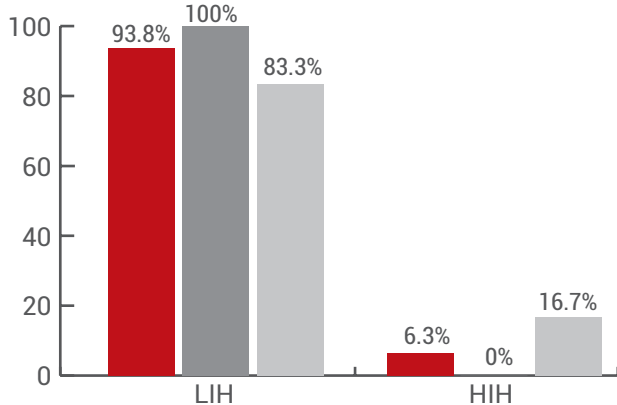
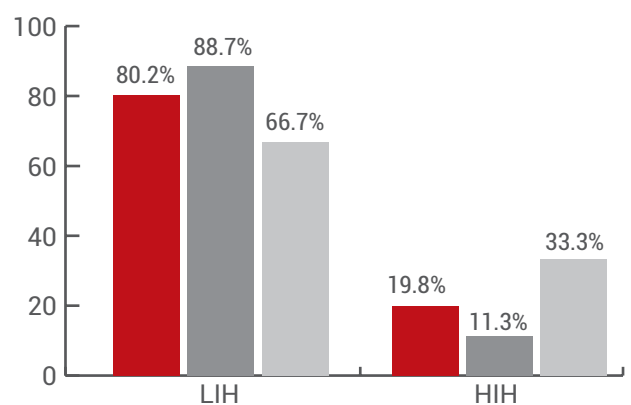


Chart 1d: % of victims that died in rural areas

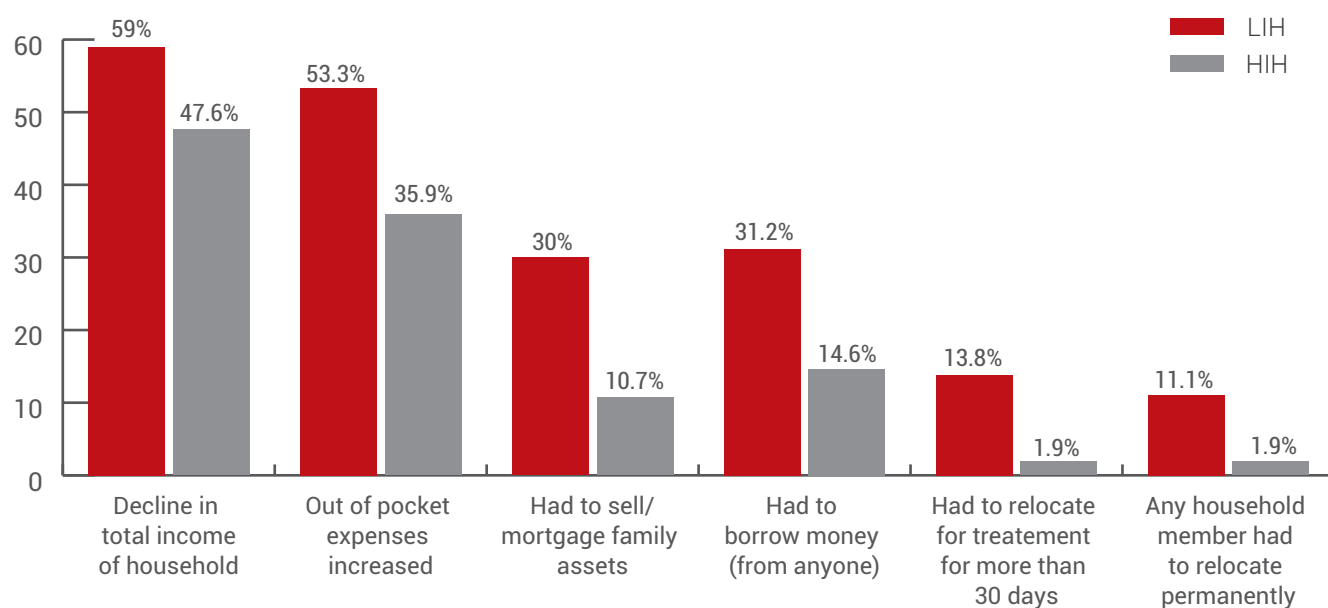


FINANCIAL IMPACT OF ROAD CRASHES IN TAMIL NADU:

59% of LIH admitted that there was a decline in total income

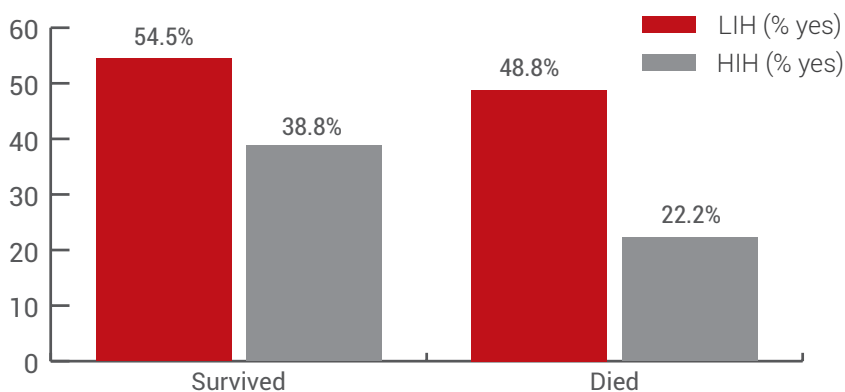
of the household due to the road crash, while 47.6% of HIH admitted to the same. Further, a larger number of cases of OOPE, property sale, money borrowing, and relocation were observed in LIH than in HIH.

CHART 2: FINANCIAL IMPACT ON THE VICTIM HOUSEHOLD



Out of pocket expenditure (OOPE) is the payment made directly by individuals at the point of service where the entire cost of the health good or service is not covered under any financial protection scheme. The OOPE for HIH was higher than for LIH. Total OOPE in Tamil Nadu was INR 58,701 for LIH, and INR 74,913 for HIH. 82.1% of the LIH where the victim survived admitted to paying OOPE, while 63.7% of the of the HIH where victims had survived admitted to paying OOPE.

CHART 3: % OF VICTIMS/FAMILIES THAT FACED OOPE

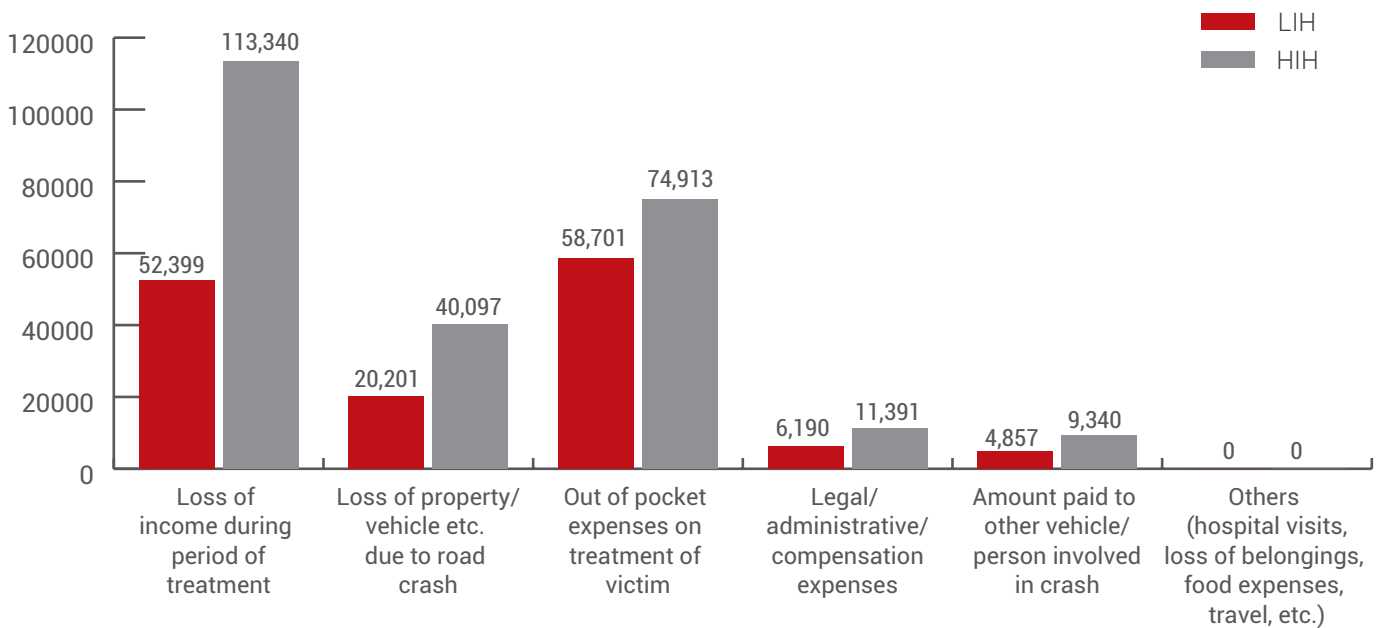


LOSSES INCURRED DUE TO ROAD CRASHES:

The total losses faced by 407 low income households and 103 high income households was INR 1,42,350, and INR

2,49,081 respectively. As HIH have significantly higher income than LIH, the loss of income was higher for HIH than for LIH. Loss of property and legal expenses accounted for about 14.2% and 4.3% of LIH losses respectively, and 16.1% and 4.6% of HIH losses respectively. The breakup of the losses is as follows:

CHART 4: LOSSES INCURRED DUE TO ROAD CRASH (INR)

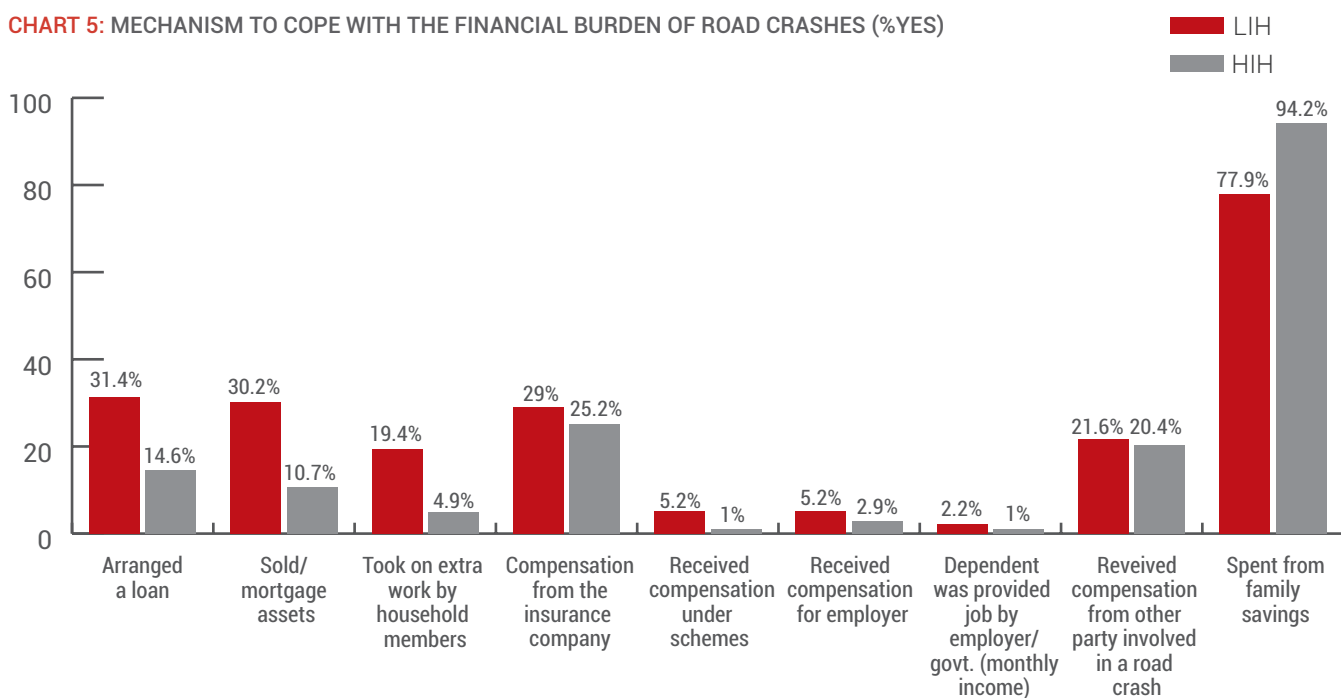


MECHANISM TO COPE WITH FINANCIAL LOSSES:

About 31% of LIH had to arrange for a loan as opposed to 14.6% of HIH. Further, a larger proportion of LIH had to resort to selling assets, and taking on extra work than HIH.

Interestingly, a larger proportion of HIH (94.2%) spent from family savings to cope with the losses than LIH (77.9%). This can be attributed to the fact that savings will be larger for HIH than for LIH.

CHART 5: MECHANISM TO COPE WITH THE FINANCIAL BURDEN OF ROAD CRASHES (%YES)



COMPENSATION AVAILED AND RECEIVED UNDER MOTOR VEHICLE, MEDICAL, AND LIFE INSURANCE SCHEMES:

- 28.5% of LIH victims and 32% HIH victims/family members availed motor vehicle insurance compensation. Among those that availed compensation, 75.9% of the LIH victims, and 66.7% of HIH victims received the eligible compensation. In terms of time taken, LIH victims received their compensation in about 3.9 months while HIH victims received it in about 6.4 months.
- 17.4% of LIH victims and 16.5% HIH victims/family members availed medical insurance compensation.

Among those that availed compensation, 88.7% of the LIH victims, and 94.1% of HIH victims received the eligible compensation. In terms of time taken, LIH victims received their compensation in about 2.2 months while HIH victims received it in about 2.4 months.

- A mere 2.5% of LIH, and 1.9% of HIH victims/family members availed life insurance compensation. Among those that availed compensation, 40% of the LIH victims, and 50% of HIH victims received the eligible compensation. In terms of time taken, LIH victims received their compensation in about 3.8 months, and HIH in about 5 months.

CHART 6: VICTIMS THAT AVAILED AND RECEIVED COMPENSATION FROM INSURANCE (% YES)

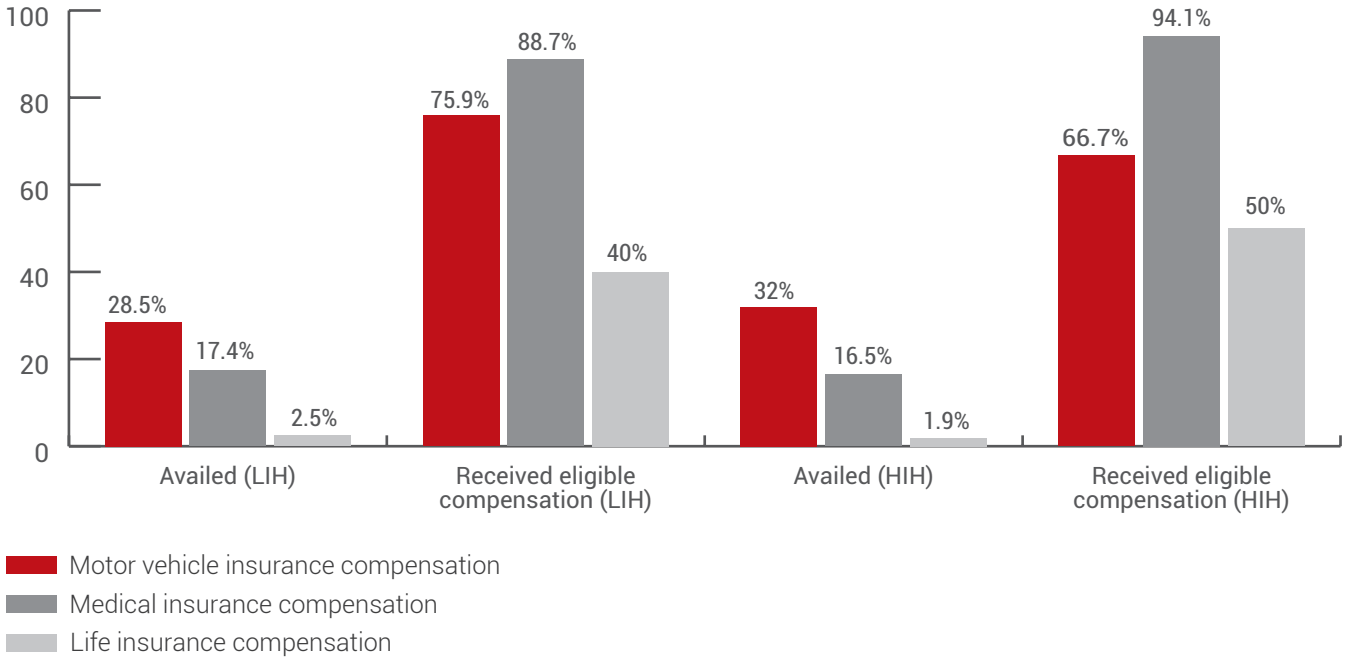
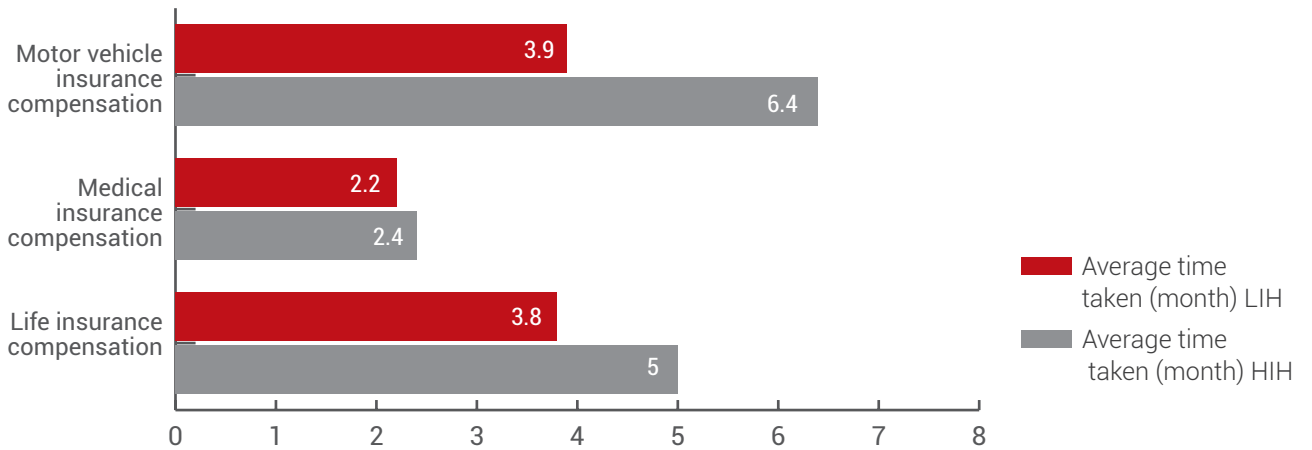


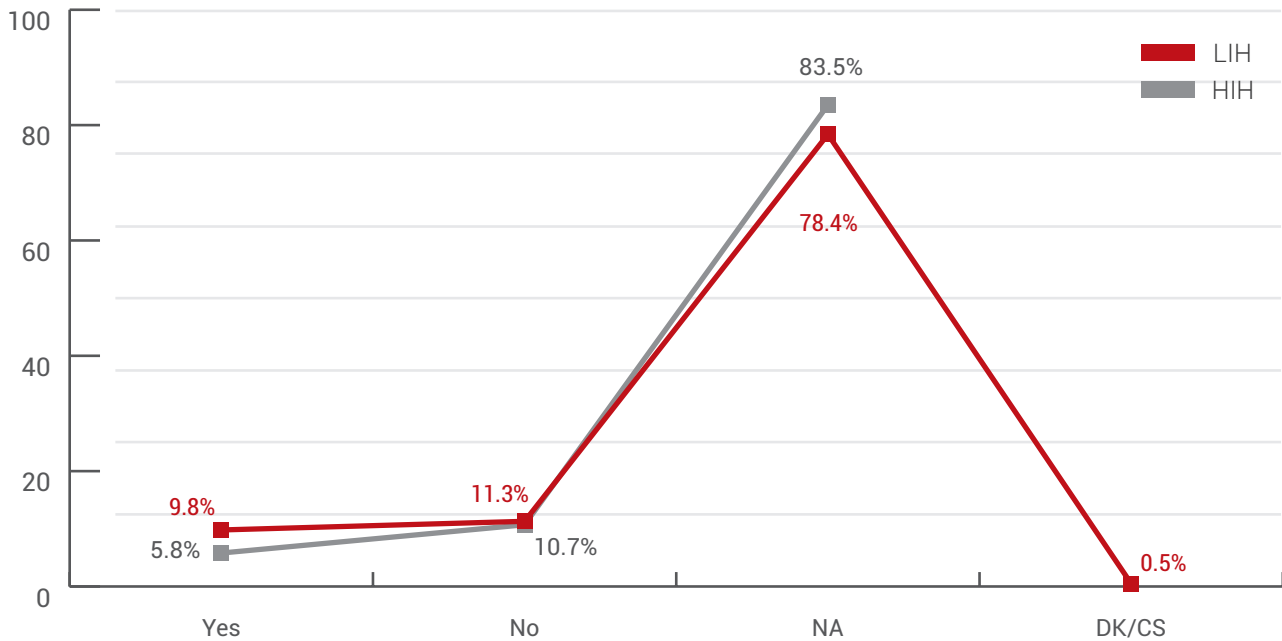
CHART 7: AVERAGE TIME TAKEN (MONTHS) TO RECEIVE COMPENSATION



DIFFICULTY IN AVAILING COMPENSATION:

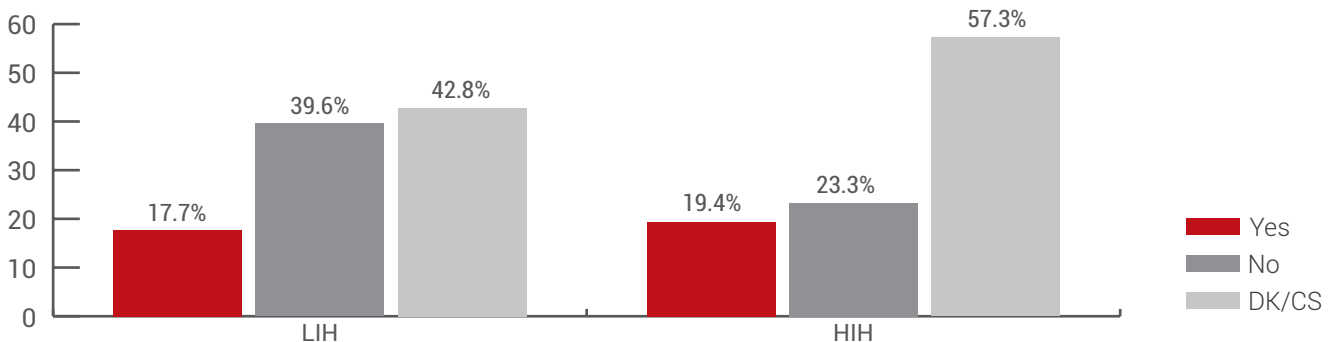
When asked about the difficulty in availing compensation, a larger proportion of LIH (9.8%) affirmatively responded than HIH (5.8%).

CHART 8: RESPONSES WHETHER VICTIM/ HOUSEHOLD MEMBER FACED ANY DIFFICULTY WHILE AVAILING COMPENSATION (%)



When asked whether a case was filed, a larger percentage of HIH (19.4%) admitted to filing a case in the Motor Accidents Claims Tribunal (MACT) than LIH (17.7%).

CHART 9: RESPONSES WHETHER VICTIM/ FAMILY FILED A CASE IN MACT (%)

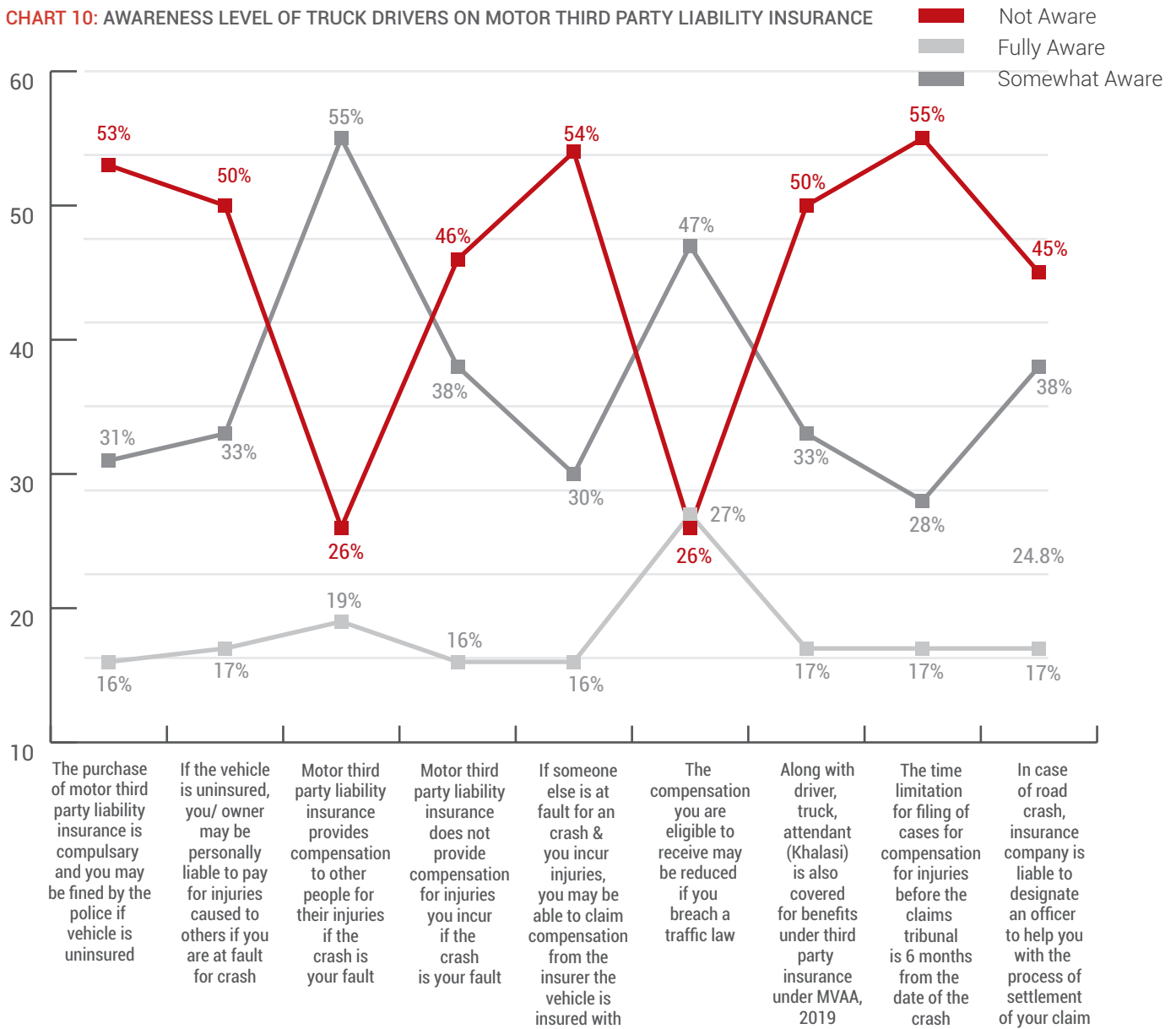


TRUCK DRIVER'S AWARENESS LEVELS ON MOTOR THIRD PARTY LIABILITY INSURANCE:

Among the 100 truck drivers surveyed in Tamil Nadu, half of the truck drivers were unaware that the attendant or khalasi is also covered under the motor third party liability insurance under the Motor Vehicles (Amendment) Act,

2019. As high as 55% of the truck drivers were unaware about the time limit for filing cases for compensation, which is 6 months from the crash occurrence. Further, as high as 45% of the drivers were unaware about the insurance company's liability to designate an officer to assist claimants in the claim settlement process. 53% of the respondents were unaware that Motor Third Party Liability Insurance is mandatory, and that the Police can charge fines for uninsured vehicles.

CHART 10: AWARENESS LEVEL OF TRUCK DRIVERS ON MOTOR THIRD PARTY LIABILITY INSURANCE

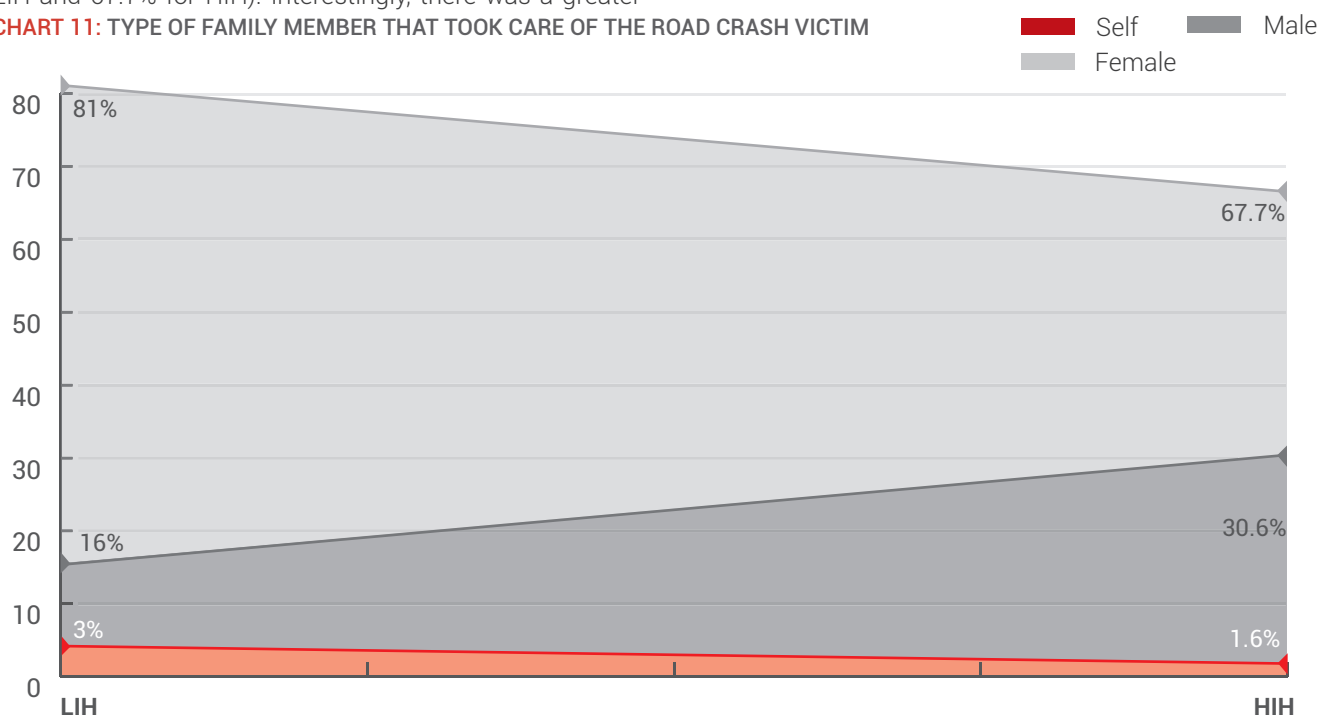


TYPE OF CAREGIVER FOR VICTIM:

In the case of both LIH and HIH, the majority of the victims had a female family member as their caregiver (81% for LIH and 67.7% for HIH). Interestingly, there was a greater

proportion of victims from LIH (3%) that took care of themselves post the crash than HIH victims (1.6%). Also, a greater proportion of male caregivers for LIH than for HIH.

CHART 11: TYPE OF FAMILY MEMBER THAT TOOK CARE OF THE ROAD CRASH VICTIM



HEALTH IMPACT ON HOUSEHOLD MEMBERS WITH VICTIMS:

34.3% of the victims from LIH admitted that their family/ household members developed health problems post crash, and 35.6% of the HIH victim household members developed health problems post crash.

CHART 12: RESPONSES ON WHETHER HEALTH PROBLEMS DEVELOPED IN HOUSEHOLD MEMBERS

Chart 12a: Household members of the victim developed health problems: LIH

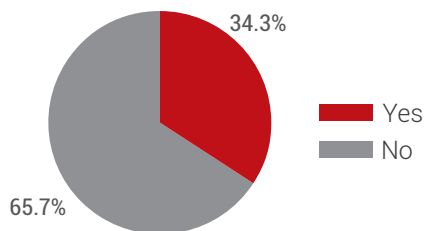
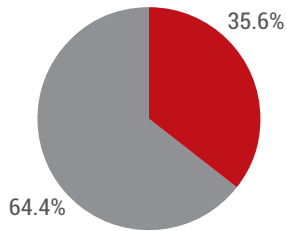


Chart 12b: Household members of the victim developed health problems: HIH

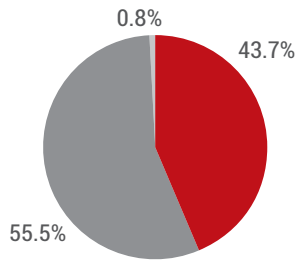


FOOD CONSUMPTION STATUS OF HOUSEHOLD MEMBERS OF THE VICTIM:

As high as 43.7% of the LIH victim's household members admitted that their food consumption has decreased post crash, while 35.6% of the HIH victim's household members admitted that their food consumption has decreased post crash.

CHART 13: RESPONSES ON WHETHER FOOD CONSUMPTION FOR HOUSEHOLD MEMBERS DECREASED

Chart 13a:
Food consumption of victim's household members has decreased: LIH



■ Yes
■ No
■ DK/CS

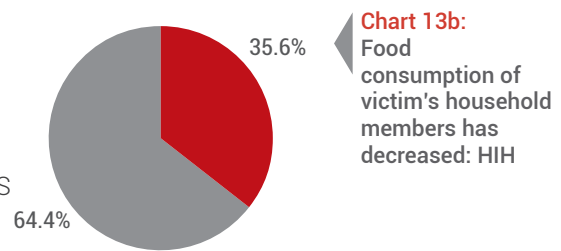


Chart 13b:
Food consumption of victim's household members has decreased: HIH

PROPORTION OF VICTIMS THAT FACED ANY DISABILITY:

In Tamil Nadu, a higher proportion of LIH victims faced disabilities than HIH victims. 47 (14.6%) of the respondents from LIH, and 4 (4.7%) of the respondents from HIH reported a disability. Among them, 29.8% of LIH reported a serious disability (*Note: no HIH reported a serious disability).

TABLE 2: RESPONSES ON WHETHER VICTIMS FACED A DISABILITY

Particulars	LIH		HIH	
	N	%Yes	N	%Yes
Tamil Nadu	323	14.60%	85	4.70%

PROPORTION OF HOUSEHOLDS, WHERE FAMILY MEMBERS FACED DEPRESSION

In Tamil Nadu, 40.8% of LIH and 50.7% of HIH reported that the victim or a household member suffered from depression post the crash.

CHART 14: RESPONSES ON WHETHER THE VICTIM/ HOUSEHOLD MEMBER SUFFERED FROM DEPRESSION

Chart 14a:
Responses on whether victim/ household member suffered from depression: LIH

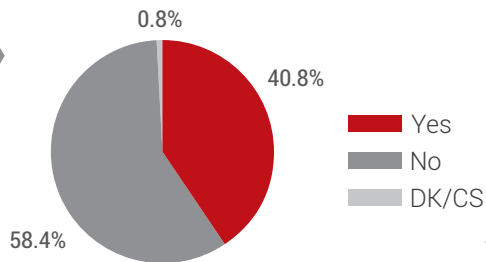
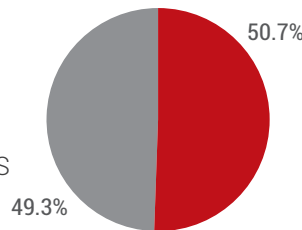


Chart 14b:
Responses on whether victim/ household member suffered from depression: HIH



DIFFICULTY IN SLEEPING FOR THE HOUSEHOLD MEMBERS POST CRASH:

In Tamil Nadu, as high as 32.7% of the household members from LIH faced difficulty in sleeping, while 38.4% of the household members from HIH faced the same.

CHART 15: RESPONSES ON WHETHER HOUSEHOLD MEMBERS HAVE DIFFICULTY IN SLEEPING

Chart 15a:
Responses on whether household members have difficulty in sleeping (LIH)

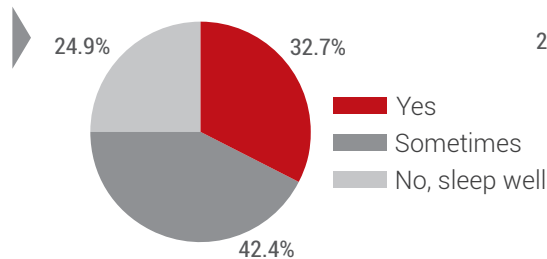
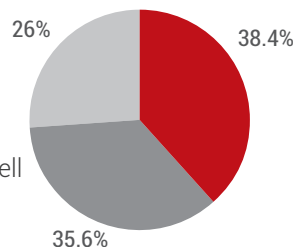


Chart 15b:
Responses on whether household members have difficulty in sleeping (HIH)



EMPLOYMENT STATUS OF VICTIMS:

In Tamil Nadu, LIH on an average, took 8 more days than HIH to return to their previous occupation, with LIH taking an average of 33 days to return to their occupation and HIH taking 25 days for the same. Further, on an average it took LIH 120 days, and HIH 60 days to find a new occupation.

RESPONSES ON WHETHER AN FIR WAS FILED FOR THE ROAD CRASH THAT THE VICTIM WAS INVOLVED IN:

In Tamil Nadu, 35.9% of the LIH and 15.5% of the HIH claim that no FIR was filed for the road crash case that the victim was involved in.

CHART 16: WAS AN FIR FILED FOR THE ROAD CRASH THAT THE VICTIM WAS INVOLVED IN?

